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Neighbourhood Greenways: Invisible Infrastructure for Walking and Cycling

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Summary

Some of the best walking and cycling routes in the world have *few* conventional pedestrian and cycle facilities.

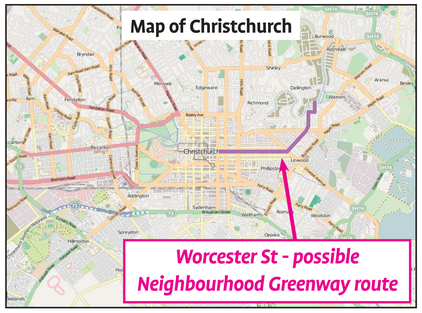
Neighbourhood greenways (aka "bicycle boulevards") are a form of street treatment where simple measures such as lower speeds, traffic restraints, wayfinding and crossing treatments are used to create an environment that is friendly for walking and cycling.

They are particularly useful for connecting people to community facilities such as schools, parks, shops and other key destinations in a neighbourhood and beyond.

Neighbourhood greenways (NGs) are a popular tool in North America (e.g. Portland and Vancouver) but have yet to catch on here in New Zealand, despite many similarities in street environment.

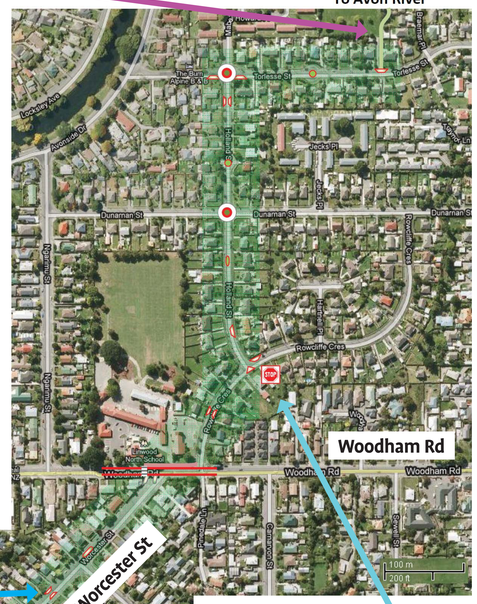
This poster outlines what kind of features typically make up NGs and how they combine to make walk/cycle-friendly streetscapes, using examples from North America.

A case study for how similar treatments could be applied in rebuilt Christchurch is also shown.



The Plan below shows a hypothetical Neighbourhood Greenway (NG) treatment in eastern Christchurch, plus examples of typical treatments.

Where applicable, connections through neighbouring parks and other off-street corridors to extend the range of routes



NG routes also tend to include kerb extension treatments that allow for raingarden-style stormwater management

Special cycle route symbols on street ("sharrows") to indicate general cycling use of the traffic lanes

Street entrance or exit restrictions, allowing only one-way access to motor vehicles whilst still providing two-way cyclist (and pedestrian) access

Contra-flow bike lanes, to allow cyclists to travel against the flow of an otherwise one-way street

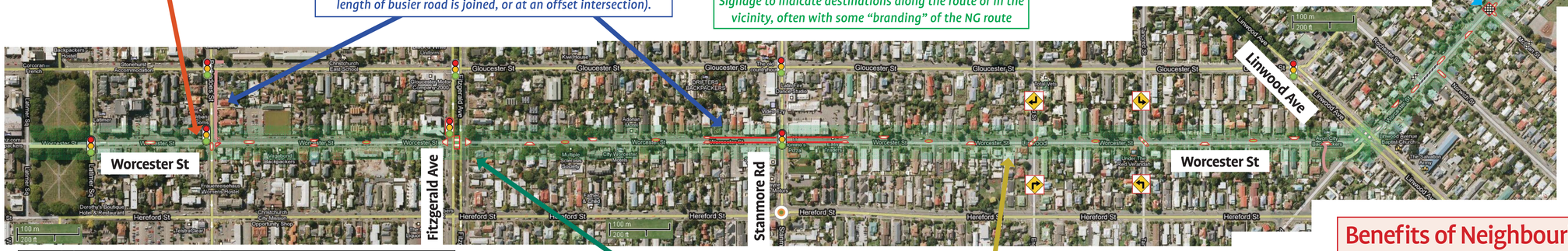
Linwood Greenway		
Linwood North Sch	1 min	1 min
Torlesse Street	8 min	3 min
Avon Park	11 min	4 min
Linwood North Shops	3 min	1 min
Woodham Park	6 min	2 min
St Pauls School	11 min	3 min
Bromley Park	8 min	2 min
Cowles Stadium	24 min	7 min

Signage to indicate destinations along the route or in the vicinity, often with some "branding" of the NG route

Other traffic calming treatments, such as raised platforms, narrowings, chicanes and speed humps

Changing the priority of STOP or GIVE-WAY controlled intersections, so that the NG route has priority (NB: generally requires additional measures along the route to discourage motor traffic from also using the route).

Short sections of cycle lane or pathway may be used to provide a designated connection along a NG route (perhaps where a short length of busier road is joined, or at an offset intersection).



Small roundabouts at intersections and central mid-block islands to slow motor traffic along a route

Legend: *(new items bordered in red)*

New STOP control		Speed Hump	
Traffic signals		Speed Platform	
Roundabout		Central splitter island	
Greenway signs with speed limit		Kerb extensions	
Greenway crossing warning signs		Central refuge island	
Greenway destination signs		Diverter with cycle bypasses	
On-road cycle lanes		One-way diverters	
Off-road shared path		Painted (flush) median	

Median islands at intersections with cycle/pedestrian gaps, preventing motor vehicles from continuing along the NG, whilst assisting cyclists and pedestrians to cross

Diagonal diverters at intersections to prevent through traffic, but with gaps for bikes

Introduction of lower posted speed limits, typically 30-40 km/h

Benefits of Neighbourhood Greenways

- Reduced through traffic (but probably not less "foot traffic") = safer, quieter, and more pleasant environment
- Possible reduction in crime, based on more active street life
- Improved ability to cross major roads while walking or cycling
- Potential to enhance neighbourhood appearance and to increase green space through kerbs, islands
- Improved neighbourhood identity and coherence.
- Potential to increase property values through improved safety and liveability.

More confidence in allowing families to safely and conveniently walk and cycle in their neighbourhood.

Research Paper for Details:

Koorey G. (2012), "Neighbourhood Greenways: Invisible Infrastructure for Walking and Cycling", *2 Walk & Cycle Conference*, Hastings, 22-24 Feb 2012, 12pp.

Acknowledgements:

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